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EXAMINER	
BOCHNA, DAVID	

ART UNIT	PAPER NUMBER
3679	

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/765,284	MALONE, DAVID S.	
	Examiner	Art Unit	
	David E. Bochna	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,12-23,25-28 and 31-33* is/are rejected.

7)☒ Claim(s) *10,11,24,29 and 30* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 16 is objected to because of the following informalities:

Claim 16 recites the limitation "the bead" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 13-16, 26-28, 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Washizu.

In regard to claim 1, Washizu discloses a fluid quick connector comprising:

a connector housing 3 having a throughbore configured to mate with an endform

a seal member 9 mounted in the bore adapted to seal the connector housing to the endform; a top hat 20 mounted in the bore of the connector housing axially adjacent to the seal member, the top hat movable between a first position (fig. 12) indicating a non-fully inserted position of the endform in the connector housing and a second position (fig. 10) upon contact with and full insertion of the endform 2 into the housing; and

retainer means 37a, transversely mounted in the housing, for latching the endform in the housing, the retainer means movable from a first non-latching position with respect to the

endform (fig. 12) to a second latching position (fig. 10) only when the endform has moved the top hat to the second position.

In regard to claim 2, means (37b and 20b) for biasing the top hat to the first position, the biasing means being movable to a position allowing sliding movement of the top hat to the second position in the bore in the housing upon contact with an endform into the bore in the housing.

In regard to claim 3, the biasing means 20b is monolithically formed on the top hat.

In regard to claim 4, wherein the biasing means comprises at least one spring arm 37b.

In regard to claim 5, wherein the spring arm 37b is flexible.

In regard to claim 6, wherein the spring arm 37b has an end portion 37a disposed at a larger outside diameter than the diameter of the bore.

In regard to claim 8, the spring arm 37b comprises a pair of spring arms 37b.

In regard to claim 9, wherein the pair of spring arms 37b are diametrically opposed on the top hat.

In regard to claim 13, wherein the top hat 20 further comprises means (outer surface of 20) for preventing movement of the retainer means 37 to the second position

In regard to claim 14, wherein the movement preventing means extends into the path of movement of the retainer means to the second position when the top hat is in the first position.

In regard to claim l 5. The fluid quick connector of claim 1 wherein the retainer includes means 37b for latching the retainer in a first position in the housing and allowing insertion of the endform 2 therepast into the bore in the housing.

In regard to claim 16, wherein the retainer further comprises inner legs 37b having an inner diameter less than the outer diameter of the bead 2 on the endform.

In regard to claim 26, Washizu discloses a top hat 20 for a fluid quick connector including a housing 3 having a throughbore configured to mate with an endform, a seal member 9 mounted in the bore adapted to seal the housing to the endform and a retainer 37 transversely mounted in the housing for latching the endform in the housing, the retainer moveable from a first non-latching position (fig. 12) with respect to the endform to a second latching position latching the endform in the housing, the top hat 20 comprising:

an annular end portion 20 insertable into the bore in the housing;

biasing means (20b and 37), extending from the annular portion, for biasing the top hat to a first position indicating a non-fully inserted position of the endform in the housing, the biasing means moveable to a position (fig. 10) allowing sliding insertion of the top hat to a second position in the bore in the housing upon insertion of the endform in the housing; and

means (annular exterior of 20), extending from the annular portion, for preventing movement of the retainer 37 to the second position, the retainer movement preventing means extending into the path of movement of the retainer to the second position when the top hat is in the first position.

In regard to claim 27, the biasing means 37 disposed for angular flexing.

In regard to claim 28, wherein the biasing means comprises:

an arcuate segment 20a extending from the annular portion 20 of the top hat;

and

an radially and angularly outward extending end portion 20b extending from the arcuate segment.

In regard to claim 31, Washizu discloses A method for preventing false sealing insertion of an endform in a fluid quick connector, the method comprising the steps of:

providing a connector housing 3 with a bore extending from a first end;

providing a seal member 9 in the bore;

providing a retainer 37 moveable from a first position with respect to the housing to a second position in the housing to latch the endform in the housing;

providing a top hat 20 mountable in the bore to maintain the seal member in the bore;

providing means 20b for blocking movement of the retainer to the second position until the endform has been fully inserted into the bore in sealing engagement with the seal member;

biasing the top hat to a first position to block movement of the retainer to the second position;

moving the top hat to the second position in the housing during contact with the endform inserted into the bore and the housing to allow the retainer to move to the second position, the second position of the top hat coinciding with the fully sealed position of the endform in the housing.

In regard to claim 32, wherein the step of providing means for blocking movement of the retainer to the second latching position comprises the step of:

providing at least one post 20b extending from an annular portion of the top hat 20, the post having an end spaced from the annular portion of the top hat extending into the path of

movement of the retainer to block movement of the retainer to the second position when the top hat is in the first position.

In regard to claim 33, wherein the step of moving the top hat to the second position comprises the steps of:

providing at least one spring arm 37b on the top hat, the spring arm defining the means for biasing the top hat to the first position with respect to the housing.

1. Claims 1-9, 12-23, 25, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Szabo et al.

In regard to claim 1, Szabo et al. discloses a fluid quick connector comprising:

a connector housing 145 having a throughbore configured to mate with an endform

a seal member 130 mounted in the bore adapted to seal the connector housing to the endform;

a top hat 80 mounted in the bore of the connector housing axially adjacent to the seal member, the top hat movable between a first position (fig. 5) indicating a non-fully inserted position of the endform in the connector housing and a second position (fig. 7) upon contact with and full insertion of the endform 42 into the housing; and

retainer means 60, transversely mounted in the housing, for latching the endform in the housing, the retainer means movable from a first non-latching position (fig. 5) with respect to the endform to a second latching position (fig. 7) only when the endform 42 has moved the top hat 80 to the second position.

In regard to claim 2, means 84 for biasing the top hat to the first position, the biasing means being movable to a position allowing sliding movement of the top hat to the second position in the bore in the housing upon contact with an endform into the bore in the housing.

In regard to claim 3, the biasing means 84 is monolithically formed on the top hat 80.

In regard to claim 4, wherein the biasing means comprises at least one spring arm 82.

In regard to claim 5, wherein the spring arm 82 is flexible (the arm is made of plastic and would have some amount of flex).

In regard to claim 6, wherein the spring arm 82 has an end portion disposed at a larger outside diameter than the diameter of the bore 124.

In regard to claim 7, a notch 90 formed in the end of the spring arm allowing radially inward flexing of the spring arm 82.

In regard to claim 8, the spring arm 82 comprises a pair of spring arms 82, 84.

In regard to claim 9, the pair of spring arms 82, 84 are diametrically opposed on the top hat.

In regard to claim 12, the wherein the spring arm 82 comprises an annular portion 90 slidable into the bore in the housing.

In regard to claim 13, wherein the top hat 80 further comprises means for preventing movement of the retainer means 60 to the second position

In regard to claim 14, wherein the movement preventing means extends into the path of movement of the retainer means to the second position when the top hat is in the first position.

In regard to claim l 5. The fluid quick connector of claim 1 wherein the retainer 60 includes means 64, 66 for latching the retainer in a first position in the housing and allowing insertion of the endform therepast into the bore in the housing.

In regard to claim 16, wherein the retainer further comprises inner legs 82, 84 having an inner diameter less than the outer diameter of the bead 42 on the endform.

In regard to claim 17, Szabo et al. discloses a fluid quick connector comprising;

a connector housing 145 having a throughbore configured to mate with an endform;

seal means 130 disposed in the bore for sealing the connector housing to the endform;

a top hat 80 mounted in the bore of the connector housing axially adjacent to the seal means, the top hat movable between a first position (fig. 5) indicating a non-fully inserted position of the endform in the connector housing and a second position (fig. 7) upon contact with and insertion of the endform 42 into the housing;

means (plastic connecting 82 and 84 to 80), monolithically formed on the top hat, for biasing the top hat to the first position, the biasing means including a pair of spring arms 82, 84 carried on the top hat; and

retainer means 60, transversely mounted in the housing, for latching the endform in the housing, the retainer means movable from a first non-latching position with respect to the endform to a second latching position only when the endform has moved the top hat to the second position;

In regard to claim 18, wherein the spring arms 82, 84 are flexible.

In regard to claim 19, wherein the spring arms 82, 84 have end portions disposed at a larger outside diameter than the diameter of the bore.

In regard to claim 20, further comprising:

a notch 90 formed in the end of the spring arms allowing angularly inward flexing of each spring arm 82, 84.

In regard to claim 21, wherein the spring arms 82, 84 are diametrically opposed.

In regard to claim 22, wherein the top hat 80 further comprises means for preventing movement of the retainer means to the second position.

In regard to claim 23, wherein the movement preventing means extends into the path of the retainer means to the second position when the top hat is in the first position.

In regard to claim 25, wherein the spring arms 82, 84 comprise an annular portion 90 slidable into the bore in the housing.

In regard to claim 31, Szabo et al. discloses A method for preventing false sealing insertion of an endform in a fluid quick connector, the method comprising the steps of:

providing a connector housing 145 with a bore extending from a first end;

providing a seal member 130 in the bore;

providing a retainer moveable 60 from a first position with respect to the housing to a second position in the housing to latch the endform in the housing;

providing a top hat 80 mountable in the bore to maintain the seal member in the bore;

providing means for blocking movement of the retainer to the second position until the endform has been fully inserted into the bore in sealing engagement with the seal member;

biasing the top hat to a first position to block movement of the retainer to the second position;

moving the top hat to the second position in the housing during contact with the endform inserted into the bore and the housing to allow the retainer to move to the second position, the second position of the top hat coinciding with the fully sealed position of the endform in the housing.

In regard to claim 33, wherein the step of moving the top hat to the second position comprises the steps of:

providing at least one spring arm 82, 84 on the top hat, the spring arm defining the means for biasing the top hat 80 to the first position with respect to the housing.

Allowable Subject Matter

2. Claims 10-11, 24 and 29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. LeClinche, Sausner, Szabo, Kubota et al., Kinder, Lewis, Szabo et al., Bartholomew and Bauer all disclose similar couplings common in the art.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Bochna whose telephone number is (703) 306-9040. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

David Bochna
Primary Examiner
Art Unit 3679
February 22, 2005